

### Highway 77 Corridor: West Beltway Study

Applicant	Location	Proposal
Nebraska Department of Roads	US Highway 77 corridor from Interstate 80 south to the planned South Beltway interchange.	Upgrade existing US-77 to freeway standards from Interstate 80 south to the planned South Beltway interchange south of Saltillo Road. This is a state project that includes construction of interchanges at Warlick Blvd. and Pioneers Blvd., and the closing of at-grade access crossings at Rokeby Rd., Yankee Hill Rd., and Old Cheney Rd.
<b>Recommendation:</b> Approval		

#### Status/Description

The Nebraska Department of Roads is proposing to amend the Mobility and Transportation element/Long Range Transportation Plan of the Lincoln-Lancaster County Comprehensive Plan to show the segment of US-77 from Interstate 80 south to the planned South Beltway interchange south of Saltillo Road as a freeway design to complete the Lincoln West Beltway concept. This proposal is a result of a signed agreement with the City of Lincoln, Lancaster County and the Nebraska Department of Roads to construct the South Beltway and the East Beltway around the City of Lincoln to improve traffic flow and to enhance safety for the traveling public. A study specifically addressing the Highway 77 portion of the planned beltway system has been completed.

This request proposes to amend the Lincoln-Lancaster County Comprehensive Plan's Mobility and Transportation element, which also acts as the Long Range Transportation Plan for the region, as follows:

- ! Upgrade US-77/West Beltway from an expressway to a freeway beginning at the planned South Beltway interchange just south of Saltillo Road and ending at Interstate 80.
- ! Construct a new interchange at Pioneers Boulevard.
- ! Construct a new interchange at Warlick Boulevard.
- ! Close access to US-77 at Rokeby Road, Yankee Hill Road, and Old Cheney Road

- ! Change the future functional classifications of US-77 from I-80 to the South Beltway interchange, the South Beltway, and the East Beltway to freeway status.

The upgrading of the US-77/West Beltway to a freeway design is to be completed in conjunction with the South Beltway. The Nebraska Department of Roads recognizes that converting this segment of highway to a freeway may take five to ten years to complete, and during this time, changes may take place in the City-County Comprehensive Plan and actual development may occur that alters traffic along the local roadway system from that shown in the current traffic study. Therefore, prior to future implementation of this proposed project, the Department of Roads will again review the traffic projections and proposed land uses to determine the feasibility of any grade separation structures at the intersections that are identified to be closed at US-77.

The US-77 project corridor, the proposed interchanges, and the proposed street closures are identified in the State's submittal letter and map for this Comprehensive Plan Amendment. (see attached letter and map from NDOR requesting this amendment)

### **System Analysis:**

**Overview:** The US-77 corridor is a freeway design that will serve existing and future traffic needs, and both local and through traffic. Future Growth Areas of Lincoln are expected to be developed to urban densities within the life of the current *Lincoln-Lancaster County Comprehensive Plan*. The Southwest Growth Area traffic includes Tier I growth that extends from Van Dorn Street to Yankee Hill Road and from US-77 to SW 14th and SW 29th Streets. Future traffic associated with Southwest Area development will come from the developing urban and rural land uses within this area and from through traffic destined for the South Lincoln Beltway, Nebraska Highway 2, and south US-77 to Beatrice. Tier II and III traffic is not included in this analysis.

**Traffic:** Over the life of the current 2025 Comprehensive Plan, traffic within the US-77 (West Beltway) corridor is expected to grow significantly as show in the table below.

<b>Year</b>	<b>2003</b>	<b>2025</b>
<b>Location</b>	<b>Cars per Day</b>	<b>Cars per Day</b>
<b>US-77</b>	11,200	37,100
<b>Warlick Blvd.</b>	8,000	33,400
<b>Pioneers Blvd.</b>	4,000	19,300

**Right-of-Way:** Acquisition of private property for highway right-of-way will be required for the project. Two houses and a number of commercial buildings must be acquired by the Nebraska Department of Roads for construction of the Pioneers Interchange. Control of access near the new interchanges will be modified or acquired.

It should be noted that additional right-of-way may be required to accommodate overpasses at the intersection locations of US-77 and Old Cheney Road, Yankee Hill Road and Rokeby Road if a grade separation structures are constructed at these locations upon at closure.

**History:** The planning and environmental elements for the South and East Beltway System are complete and the South Beltway is under design. Construction of the South Beltway is expected to take place within this planning period. The East Beltway is not likely to be constructed until late in the planning period and could carry over beyond the life of the current Comprehensive Plan.

**The South Beltway Project Agreement:** There is a “Design and Construction Agreement between the City of Lincoln, Lancaster County and the State of Nebraska, Department of Roads for the design and construction of the South Lincoln Beltway” that was executed on May 9, 2002. It is recognized within this agreement that when the South Beltway is completed the upgrading, West Beltway (US-77) to a freeway classification is a logical response.

Section 6 of the South Lincoln Beltway Design and Construction Agreement states:

“The City, County and State acknowledge that with the construction and completion of the South Beltway it is prudent to upgrade the West Beltway (US-77) from an expressway to freeway classification, from the junction of the South Beltway and US-77 to the junction of Van Dorn Street and US-77. The City, County and State agree that the expense of upgrading the West Beltway will be included in the ‘special project funds’ requested in Section 1.”

**Schedule:** Construction of this project will be dependent upon availability of future funds. Based upon the current construction program for the Nebraska Department of Roads, construction is not expected for five to ten years in the future.

### Comprehensive Plan Implications

On page F106 of the Comprehensive Plan, the Nebraska Department of Roads is identified as presently studying portions of Highway 77 as it passes through Lincoln to consider upgrading this roadway to freeway status. This study is now completed. The findings of this study are proposed in this amendment.

As part of the beltway system proposed in the Comprehensive Plan on pages F106 and 107, the upgrade of US-77 to freeway status on the west side of Lincoln will complete the planned freeway system that includes the East Beltway, South Beltway, and Interstate 80 on the north. It is acknowledged in the Comprehensive Plan, and by the Nebraska Department of Roads, that of the two new planned beltways, the South Beltway must be built first and is considered a committed project. The Nebraska Department of Roads also acknowledges that the upgrading of US-77 to freeway status is to be completed in conjunction with the South Beltway.

In addition, the Comprehensive Plan highlights many principles and objectives in regard to transportation on page F87. These principles and objectives relate to and should be considered as part of the review of this proposed amendment. They are as follow:

*“A Connected City. In Lincoln and Lancaster County, the unifying qualities of transportation will be emphasized. The transportation network will sustain the One Community concept by linking neighborhoods together. Neighborhoods, activity and employment centers, rural communities, and open lands will be connected by a continuous network of public ways.*

*A Balanced Transportation System. Transportation planning in Lincoln will be guided by the principle of balancing needs and expectations. It will recognize that transportation is a means to the goal of a unified, liveable, and economically strong community, and not an end in itself. Thus, the system will effectively move people and goods around the community, while minimizing impacts on established neighborhoods and investments. The concept of balance also applies to methods of transportation. While the system must function well for motor vehicles, it should also establish public transportation, bicycling, and walking as realistic alternatives now and in the future.*

*Transportation as a Formative System. Transportation and land use are linked systems. The land use plan, which includes projections of future development, determines the character of the transportation plan. On the other hand, transportation has a major impact on the form of the City. Lincoln and Lancaster County will use major road projects to reinforce desirable development patterns.*

*Planning as a Process. Transportation planning is a dynamic process, responding to such factors as community growth, development directions, and social and lifestyle changes. Therefore, the Comprehensive Plan should also establish an ongoing process that responds to these changes.*

*Developing a balanced transportation system that meets the mobility needs of the community and supports Lincoln and Lancaster County’s land use projections and plan.*

*Using the existing transportation system to its best advantage.*

*Increasing the use of alternate means of transportation, including public transportation, bicycle transit, and pedestrian movement, by improving and expanding facilities and services and encouraging compact, walkable land use patterns and project designs.*

*Continuing Lincoln's street and trails network into newly developing areas.*

*Designing a street and road improvement program that is both physically attractive and sensitive to the environments of urban neighborhoods."*

Three public departments, the Lincoln Parks and Recreation Department, the Lincoln-Lancaster County Health Department, and the Lancaster County Engineering Department provided comments to this proposed Comprehensive Plan Amendment. They are as follow:

**Lincoln-Lancaster County Health Department**

- ! "The LLCHD notes that residential zoning is abutting part of the West Beltway which is proposed to be upgraded from expressway to freeway standards. An increase in noise pollution from traffic can be a public health concern for adjacent residential populations. Lincoln Municipal Code (LMC) 8.24 Noise Control Ordinance provides guidance on what are acceptable noise levels for our community based upon the receiving land-use. The LLCHD advises, that if necessary, appropriate noise abatement measures are taken to reduce the impact of traffic noise pollution on residential population."

**Lincoln Parks and Recreation Department**

- ! "The proposed upgrade must allow for service access to Wilderness Park on an existing entrance on the east side of Highway 77 and Yankee Hill Road. This is the Parks Department's only access for equipment into this area of the park.
- ! Due to the upgrade of the highway from an expressway to a freeway, potential for resulting in the reduction of bicyclists from riding along this section, the Comprehensive Plan needs to address additional options and alternate routes for bicyclists, typically using this section of the highway."

**Lancaster County Engineering Department**

- ! "Upon review, this office has no comments or objections to this submittal."

**Conclusion**

This amendment to show this segment of US-77 as a freeway with new interchanges at Pioneers Boulevard and Warlick Boulevard generally meets the principles and objectives of the Comprehensive Plan.

In addition, a description of subsequent planning activities that may need to take place at the project development stage prior to implementation should be included in the Comprehensive Plan. This recommendation is to identify additional review and study, as needed, at project development stage for the potential of adding an overpass at the intersections recommended for US-77 access closure. These intersections include Rokeby Road, Yankee Hill Road, and Old Cheney Road.

The State of Nebraska prohibits bicycles on Interstates and freeways but not expressways. Such a restriction will bar bicyclists from using this segment of US-77 as a result of upgrading it to a freeway. There were comments made by the public during the public hearing stage of this study that dealt with the impact on the bicycling community that uses US-77 as an on-street road route. Additional joint planning should take place between the City, County, and State at project development stage to address the bicycle restriction issue and to work together to provide a comparable alternative for cyclists.

Other map changes to the **Future Functional Classification: City Streets** map on page F103 of the Comprehensive Plan and the **Future Functional Classification: County Roads** map on page F104 are needed as part of this amendment to change the classification of US-77, the South Beltway, and the East Beltway to freeway status from principal arterial status. These maps are also attached as part of this report as Appendix A and Appendix B to indicate the necessary changes.

Map changes to the **Projects & Studies: Lincoln Area Street & Road Improvements 2025** map on page F105 in the Mobility and Transportation element of the Comprehensive Plan are required for this amendment. A map is attached to this report as Appendix C to indicate these necessary map changes.

Also needed will be particular text changes to pages F106 and F111 to update the Comprehensive Plan so that it indicates all of the changes that are part of this amendment.

Amend the Comprehensive Plan as follows:

1. Amend the **Lincoln Area Street and Road Improvements 2025** map on page F105 to indicate the proposed updates and additions to the Comprehensive Plan as follow:
  1. Replace the US-77 and Pioneers Boulevard “Overpass/Interchange Study” designation with an “Interchange” designation.
  2. Remove the “Overpass/Interchange Study” designation for the US-77 and Old Cheney Road intersection.
  3. Add a “Study” symbol at US-77 and Old Cheney Road, Yankee Hill Road, and Rokeby Road reflecting the intent to “Study” for a potential overpass at project development stage and prior to closure.
2. Amend the **Future Functional Classification: City Streets** map on page F103 and the **Future Functional Classification: County Roads** map on page F104 to indicate the proposed updates and additions to the Comprehensive Plan as follow:

1. Change the classification of US-77 from I-80 to the planned South Beltway interchange, the South Beltway, and the East Beltway to freeway classification from their current principal arterial classification.
3. Amend the text of the Mobility and Transportation element of the Comprehensive Plan on pages F106 and F111 to update the status of the Nebraska Department of Roads' US-77 study and to add proposed projects and studies that relate to the findings of the US-77 study:

### **Page F106**

Amend the language related to the State's US-77 study as follows:

- ! *"The Nebraska Department of Roads ~~is presently studying~~ has completed study of portions of ~~State~~ US Highway 77 as it passes through Lincoln. This study ~~will give~~ gave consideration to upgrading the facility to freeway status from its present classification as an expressway. This upgrade ~~would~~ will require eliminating existing at-grade intersections. These intersections could be replaced with interchanges, overpasses ~~or underpasses~~, or the road connection could be eliminated all together ~~and~~ with no crossing provided. Additional review and study will be conducted, as needed, at project development stage for the potential of adding an overpass at the intersections recommended for US-77 access closure. These intersections include Rokeby Road, Yankee Hill Road, and Old Cheney Road.*

*As part of the implementation of this project to upgrade US-77 to freeway status the needs of pedestrians and bicyclists will be addressed. It was affirmed during the study process that the proposed pedestrian and bicycle crossing points at the planned Pioneers Boulevard interchange and at the abandoned railroad right-of-way south of the planned Warlick interchange would be provided. The existing US-77 bridge structures over the abandoned railroad right-of-way are intended to remain and be used to separate US-77 traffic from pedestrians and bicyclists, and the design of the new Pioneers interchange is to contain a multi-use trail facility. An extensive system of trail facilities is planned within this area extending along both the east and west side of the US-77 corridor. The US-77 trail connections will allow pedestrians and bicyclists between the new growth area to the west and the existing urban area and the Wilderness Park Trails system to the east of US-77. Also, the City, County, and State will work together to resolve bicycle access issues that will result from the upgrading of this segment of US-77 to freeway status. The City, County, and State will collectively work together to provide a comparable alternative for cyclists."*

### **Page F111**

Add to the list of Proposed Projects the following:

!	<u>US-77/West Beltway Upgrade to Freeway Status from I-80 to South Beltway</u>	<u>Upgrade to Freeway</u>
▶	<u>Construct new interchange at Pioneers Blvd.</u>	<u>Interchange</u>
▶	<u>Construct new interchange at Warlick Blvd.</u>	<u>Interchange</u>
▶	<u>Close access to US-77 at Rokeby Rd., Yankee Hill Rd., and Old Cheney Road</u>	<u>Access Closure</u>

Add to the list of Proposed Studies the following:

- ! As part of the US-77/West Beltway project, study for a potential overpass at project development stage and prior to closure at US-77 and Old Cheney Road, Yankee Hill Road, and Rokeby Road.

Remove from the list of Proposed Studies the following:

- ! ~~Old Cheney Rd. And US-77: Overpass/Interchange Study~~
- ! ~~US-77 and Pioneers Blvd.: Overpass/Interchange Study~~

Prepared By:

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David Cary, 441-6364

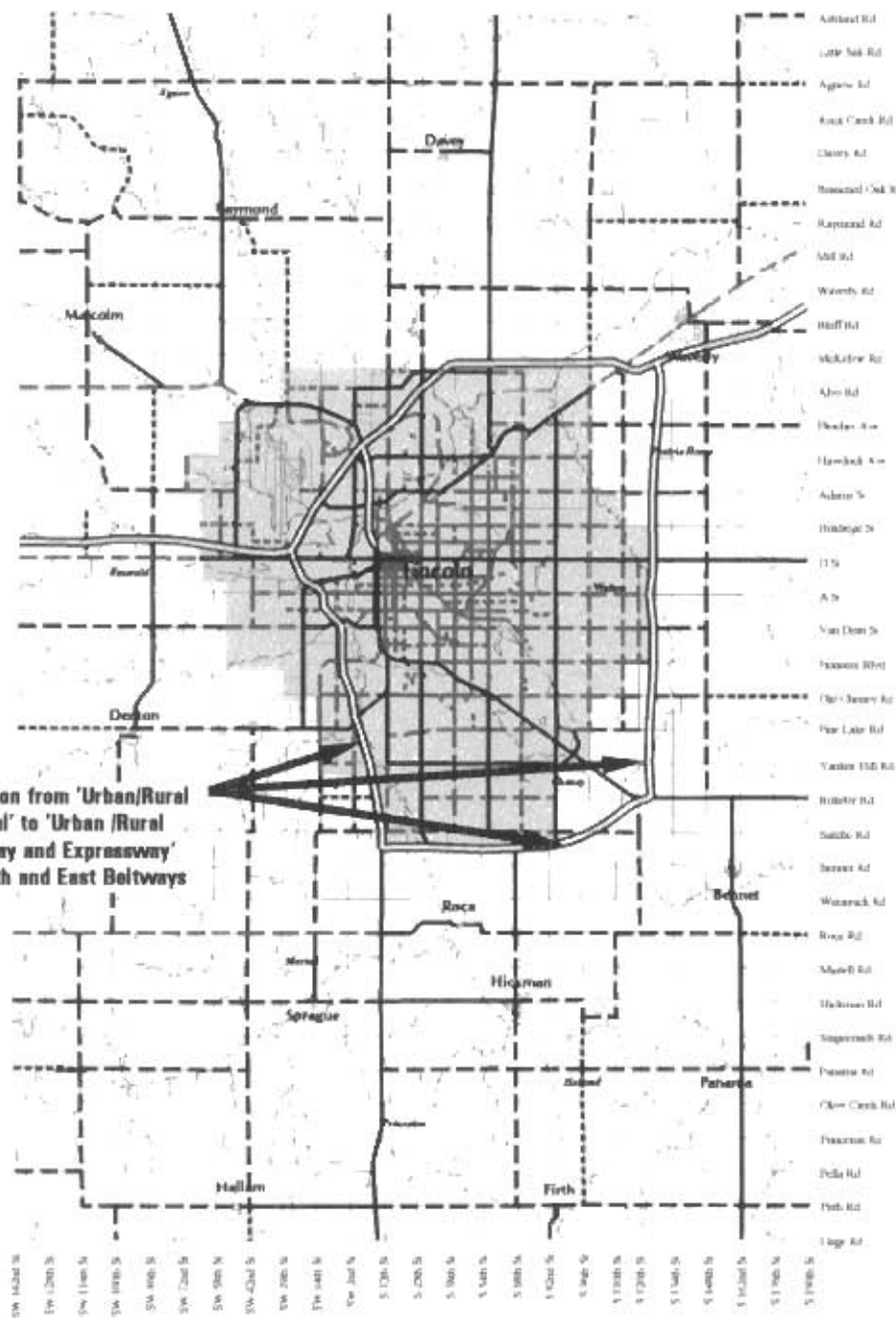
[dcary@ci.lincoln.ne.us](mailto:dcary@ci.lincoln.ne.us)

August 4, 2004





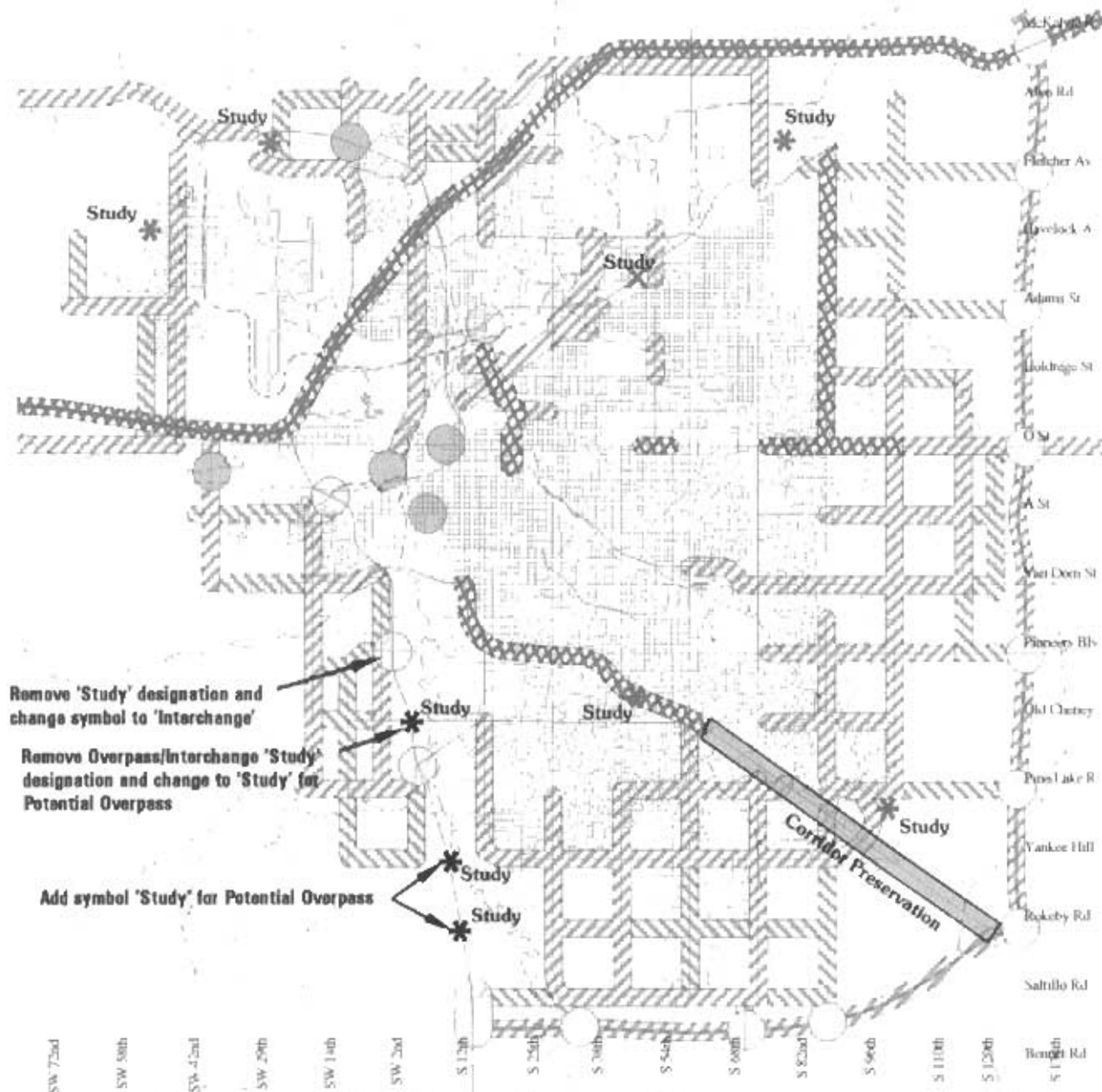
Change classification from 'Urban/Rural Principal Arterial' to 'Urban/Rural Interstate, Freeway and Expressway' on US 77 and South and East Beltways



## Future Functional Classification - County Proposed Amendment 04020 - Exhibit B









- Urban / Rural Interstate, Freeway and Expressway
- Urban / Rural Principal Arterial
- Urban / Rural Minor Arterial
- Urban Collector
- Rural Major Collector (County)
- Rural Major Collector (State)
- Rural Minor Collector
- Urban Area Boundary





# Street & Roadway Improvements

## Proposed Amendment 04020 - Exhibit C

-  Corridor Preservation
-  2 Lanes + CTL
-  4 Lanes + TL
-  6 Lanes + TL
-  6 Lane Interstate Highway
-  Four Lane Freeway, 300 Ft. ROW
-  Overpass
-  Interchange

- x Street Closure Study
- \* Study



Future Service Limit

# STATE OF NEBRASKA

## DEPARTMENT OF ROADS

**John L. Craig**, Director

1500 Highway 2

PO Box 94759

Lincoln NE 68509-4759

Phone (402)471-4567

FAX (402)479-4325

www.dor.state.ne.us

RECEIVED

JUN 28 2004

LINCOLN CITY/LANCASTER COUNTY  
PLANNING DEPARTMENT

June 25, 2004



**Mike Johanns**  
Governor

**Mr. Marvin Krout**  
Planning Director  
City of Lincoln  
555 S 10<sup>th</sup> St  
Lincoln NE 68508-3993

Re: Project No. NH-77-2(156)  
Control No. 12552A  
Lincoln West Beltway

Dear Mr. Krout:

The Nebraska Department of Roads is proposing to amend the Lincoln-Lancaster County Long-Range Transportation Plan. The roadway segment is located on US-77 from Saltillo Road to I-80, otherwise known as the West Beltway. This segment is being upgraded from an expressway to freeway standards. The upgrade is a result of a signed agreement with the City of Lincoln, Lancaster County, and the Department of Roads to construct the South Beltway and to upgrade this segment around the City of Lincoln to improve traffic flow and to enhance safety for the traveling public.

NDOR has completed a study to evaluate the needs and to develop a conceptual design for the upgrade of the West Beltway to a freeway. The findings from the study have been documented in the Traffic Analysis and Conceptual Design Report, dated February 2003. The study was based on the proposed land uses and predicted growth within the project area as shown in the current City/County Comprehensive Plan. The study considered both existing and planned three- and four-lane improvements. Recommendations for interchanges and access closures were made that would still provide acceptable levels of operation for the traveling public.

Preliminary design plans were developed based on the study. The designs were shared with the community at a public information meeting that was held in November 2003. A Design Public Hearing was held on April 14, 2004. Statements and comments were received, and a transcript was made dated May 6, 2004. The transcript has been shared with the City of Lincoln and Lancaster County. From the transcript, comments in support and in opposition to the project were received.

Mr. Marvin Krout  
Page 2  
June 25, 2004

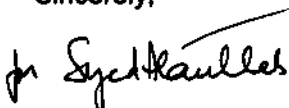
Based on the Traffic Analysis and Conceptual Design Report, Preliminary Design Plans, and input through the public meeting process, NDOR proposes to amend the Lincoln-Lancaster Long-Range Transportation Plan on the West Beltway as follows:

- Upgrade the West Beltway from an expressway to a freeway, beginning at the South Beltway and ending at I-80.
- Construct a new interchange at Pioneers Blvd.
- Construct a new interchange at Warlick Blvd.
- Close access to US-77 at the following locations:
  - Rokeby Road
  - Yankee Hill Road
  - Old Cheney Road

The upgrade of the West Beltway to a freeway will be completed in conjunction with the South Beltway. The Department recognizes that to convert it to a freeway may be five to ten years in the future and during this time, changes to the City/County Comprehensive Plan, along with actual development that may occur, may alter traffic volumes along the local roadway system from those shown in the current traffic study. Therefore, prior to future implementation of the project as proposed, the Department will again review the traffic projections and proposed land uses to determine the feasibility of any grade separation structures at any of the intersections that are currently identified to be closed at US-77.

Following the action from the Planning Commission, the Nebraska Department of Roads anticipates presenting the Lincoln West Beltway upgrade to a freeway to the State Highway Commission for their recommendation and then to the Governor for approval. It is anticipated that construction may begin in five to ten years, based on the availability of funds.

Sincerely,



Lou Lenzen  
Assistant Design Engineer

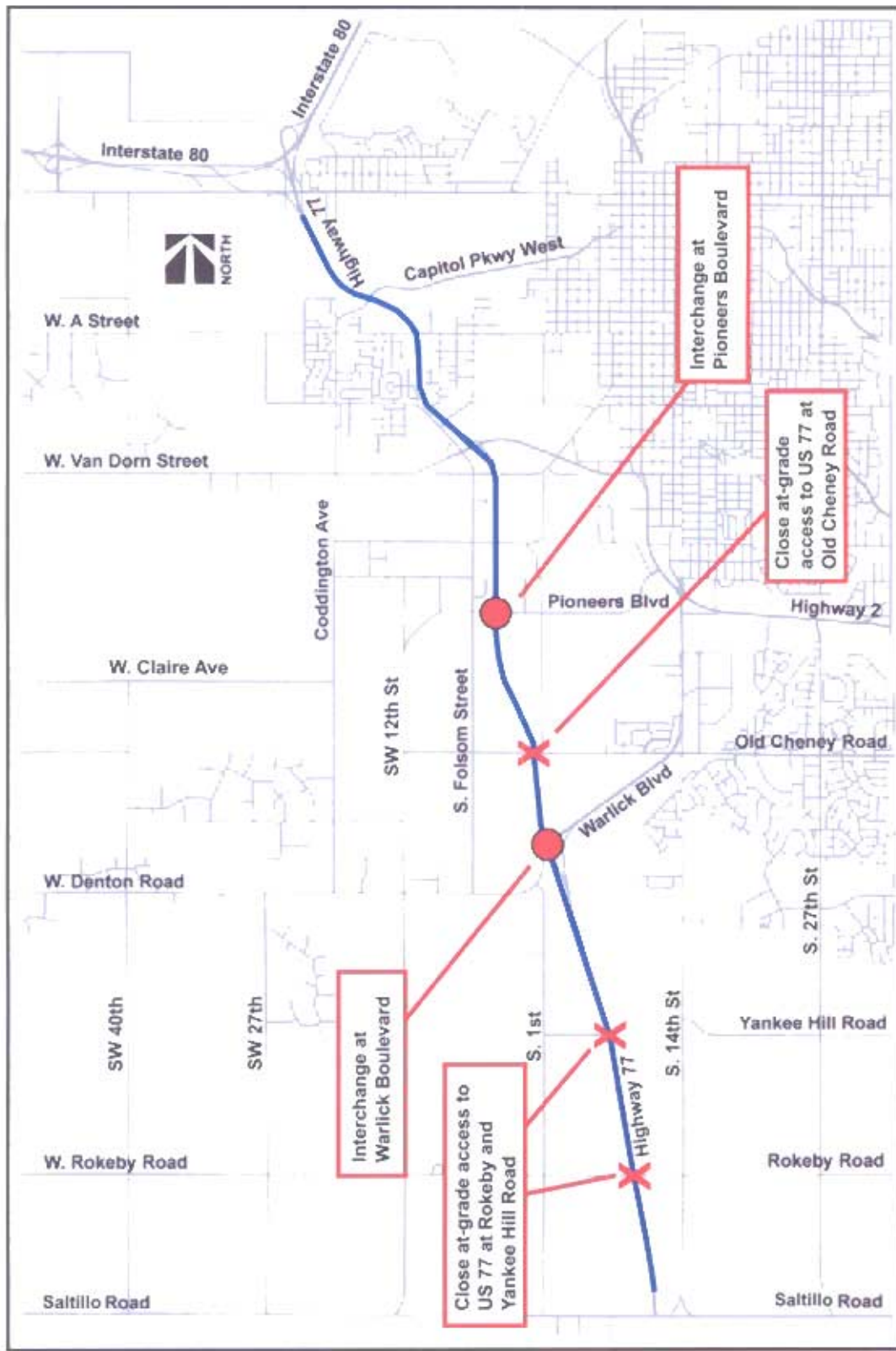
LL:P5-A1-2

Attachments:

- Location Map
- Traffic Analysis and Conceptual Design Report, dated February 2003
- Comments received from Public Information meeting held on November 12, 2003

xc: Allan Abbott, Director of Public Works, City of Lincoln  
File

# US 77 Corridor, Saltillo Road to I-80



**LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT  
INTER-OFFICE COMMUNICATION**

<b>TO:</b> David Cary	<b>DATE:</b> July 22, 2004
<b>DEPARTMENT:</b> Planning	<b>FROM:</b> Chris Schroeder
<b>ATTENTION:</b>	<b>DEPARTMENT:</b> Health
<b>CARBONS TO:</b> EH File EH Administration	<b>SUBJECT:</b> PAS #04020

The Lincoln-Lancaster County Health Department (LLCHD) has reviewed the proposed Long-Range Transportation plan modifications with the following noted:

- The LLCHD notes that residential zoning is abutting part of the West Beltway which is proposed to be upgraded from expressway to freeway standards. An increase in noise pollution from traffic can be a public health concern for adjacent residential populations. Lincoln Municipal Code (LMC) 8.24 Noise Control Ordinance provides guidance on what are acceptable noise levels for our community based upon the receiving land-use. The LLCHD advises, that if necessary, appropriate noise abatement measures are taken to reduce the impact of traffic noise pollution on residential populations.

# Memo



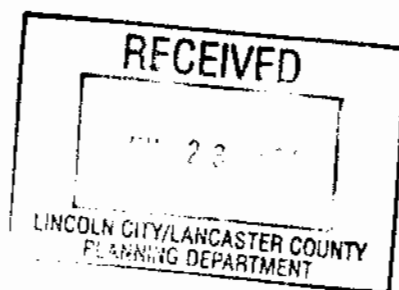
**To:** David Carey, Planning Department  
**From:** Mark Canney, Parks & Recreation *MC*  
**Date:** July 21, 2004  
**Re:** NDOR Comp Plan Amendment for HWY 77 Corridor Plan  
**CC:** Terry Genrich, Parks & Recreation

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Staff members of the Lincoln Parks and Recreation Department have conducted a plan review of the above-referenced application/proposal and have the following comments:

1. The proposed upgrade must allow for <sup>service</sup> access to Wilderness Park on an existing entrance on the east side of Highway 77 and Yankee Hill Road. This is the Parks Departments only access to equipment into this area of the park.
2. Due to the upgrade of the highway from an expressway to a freeway, potential for resulting in the reduction of bicyclists from riding along this section, the Comprehensive Plan needs to address additional options and alternate routes for bicyclists, typically using this section of the highway.

If you have any additional questions, comments or concerns, please feel free to contact me at 441-8248. Thank you.







Lancaster

County

Engineering

Department

DON R. THOMAS - COUNTY ENGINEER

DEPUTY- LARRY V. WORRELL  
COUNTY SURVEYOR

**DATE:** July 14, 2004  
**TO:** David Cary  
Planning Department  
**FROM:** Don R. Thomas Don R. Thomas  
County Engineer  
**SUBJECT:** PAS NO. 04020  
NDOR COMPREHENSIVE PLAN AMENDMENT  
HIGHWAY 77 CORRIDOR PLAN

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Upon review, this office has no comments or objections to this submittal.

DRT/LW/cm

DRT/Comp Plan Amend for W By-Pass.Mem

